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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/982,436 | 10/18/2001 | Michael Putnam | PGI6044P0041US | 6583 |
| 32116 | 7590 | 03/03/2006 | EXAMINER | |
| WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661 | | | COLE, ELIZABETH M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1771 | |

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,436

Applicant(s)

PUTNAM ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9, 11-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/4/04

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. Claims 9, 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention for the reasons set forth in paragraph 2 of the previous action. Further, with regard to claim 9, it is not clear what is meant by "without substantially breaking said filaments". Does this mean that individual filaments can be broken but that a majority of filaments are not or does this mean that a majority of filaments can be damaged but not broken or severed?
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 9, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-140,148 in view of Homonoff et al, U.S. Patent No. 5,151,320 as set forth in the previous action.
4. Claims 9, 11-12 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Arnold et al, U.S. Patent No. 5,707,468. Arnold discloses a spunbonded fabric which is minimally bonded in order to provide just enough integrity to the fabric to allow it to be further processed but not to detrimentally affect the web. See abstract. After the web is minimally bonded it can then be hydroentangled. Col. 4, lines 58-64. The fabric is made of continuous filament which have diameters of from 7-30 microns. It is noted that US patent 4,892,534 at col. 4, lines 1-6, shows that polyester and polypropylene fibers having a denier of about 3 have a diameter of about 35 microns. Therefore, the Arnold fibers meet the claimed denier range of 0.2 – 3 denier since it teaches a diameter of 7-30 microns. The

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spunbonded webs of Arnold have a basis weight of 5-407 gsm. See col. 7, lines 1-4.

Arnold does not specifically teach that the hydroentangling step breaks bonds without substantially breaking the filaments, however, since Arnold specifically teaches a minimally bonded spunbonded web having the same size filaments and the same basis weight, it is reasonable to presume that the hydroentangling step of Arnold would also break bonds without substantially breaking the filaments. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

See MPEP § § 2112- 2112.02

5. Applicant's arguments filed 12/19/05 have been fully considered but they are not persuasive. With regard to the 112 2nd paragraph rejection, Applicant argues that one skilled in the art have a thorough and complete understanding of applicants' claimed invention. However, the rejection is maintained because the difference between light thermal bonding and more significant thermal bonding is not set forth and therefore the metes and bounds of the claim is not clear. It is not clear what type and/or amount of bonding would be considered to relatively light and therefore the scope of the claims is not clear.

6. With regard to the combination of JP '148 in view of Homonoff et al, Applicant argues that since JP '148 does not teach lightly bonding the web that JP '148 teaches away from lightly bonding the web. However, the examiner disagrees that the absence

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of a teaching is the same as teaching against lightly bonding the web. Further, Homonoff teaches lightly prebonding spunbonded webs which are going to be subjected to hydroentangling in order to impart sufficient strength to the spunbonded to allow further processing. Therefore, Homonoff provides a motivation for lightly prebonding the spunbonded.

7. Applicant argues that there is no support for the assertion that since Yoshimura teaches applying the water jets to the sheet of Yoshimura in order to entangle the pulp sheet with the spunbonded layer the bonds of the spunbonded layer would have to be broken. However, the support for this assertion is found in the fact that Yoshimura teaches hydroentangling the pulp sheet and the spunbonded sheet and Homonoff teaches employing only a lightly bonded spunbonded. Therefore, since Applicant argues that the structure claimed, i.e., one in which the bonds between the filaments are broken but the filaments are not broken is due to the use of a lightly bonded spunbonded, the use of a lightly bonded spunbonded in Yoshimura would produce the same result.

8. Applicant argues that Homonoff does not teach disrupting the bonds of a minimally-bonded web. However, Homonoff teaches that only 3-4 percent of the web can be bonded. Therefore, Homonoff does teach a minimally bonded web.

9. With regard to the rejection over Arnold, the rejection is made under section 102(b). The citation to Datta is provided only to show that polypropylene or polyester fibers having a diameter as taught by Arnold would necessarily have the claimed denier. Datta is not used to say that the use of these fibers is obvious or to in any way modify

the Arnold reference, but only to point out that the fibers of Arnold have the claimed denier.

10. Further with regard to Arnold, Applicant argues Arnold's teachings are the same as those of Homonoff and Yoshimura, because the spunbonded web is employed as a supporting layer for associated web, without any consideration of disrupting the bonds of the spunbonded layer, by hydroentanglement, without substantial filament breakage. However, Arnold teaches that webs which have been minimally bonded can be hydroentangled. Since the Arnold web has the same structure and is processed the same way as the claimed web, the Arnold web would necessarily have the same properties.

11. The terminal disclaimer filed on 12/19/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,430,788 has been reviewed and is accepted. The terminal disclaimer has been recorded.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771

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